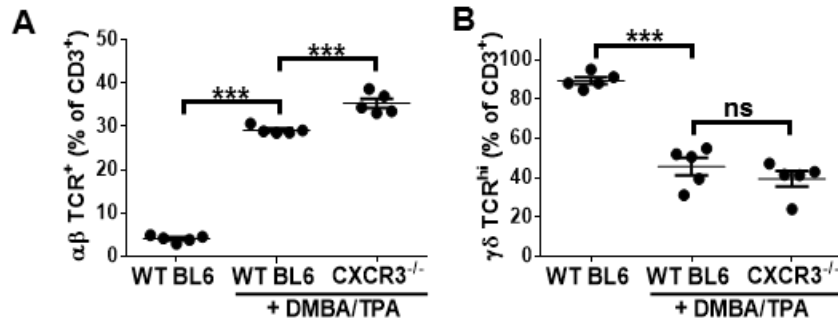
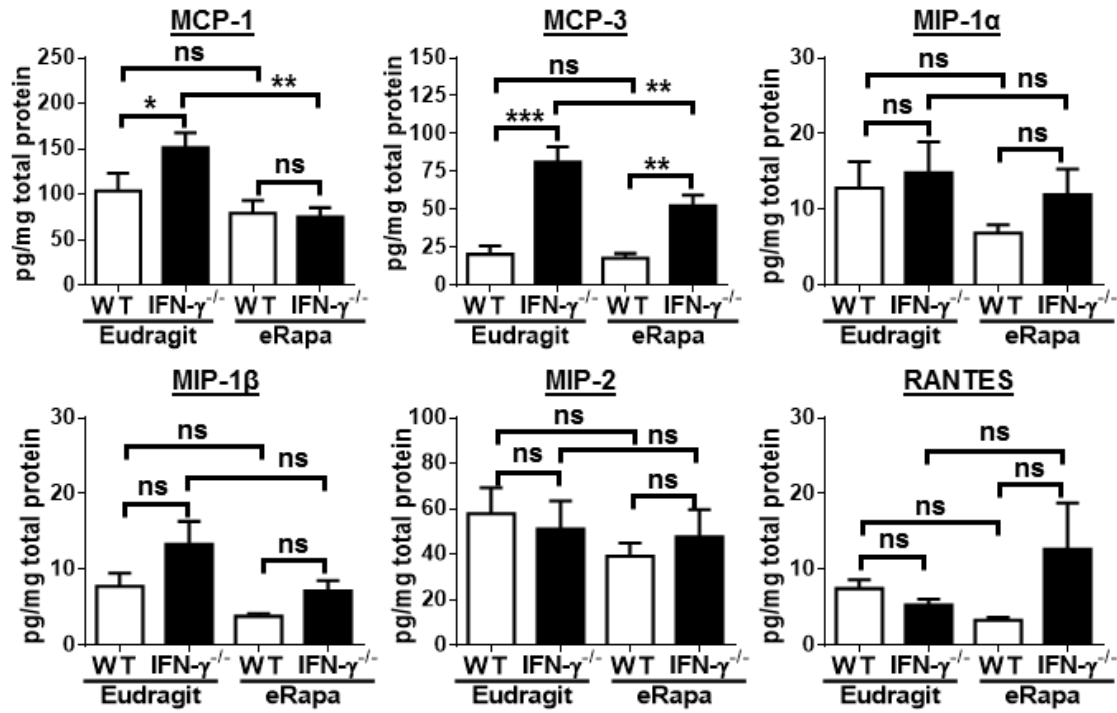


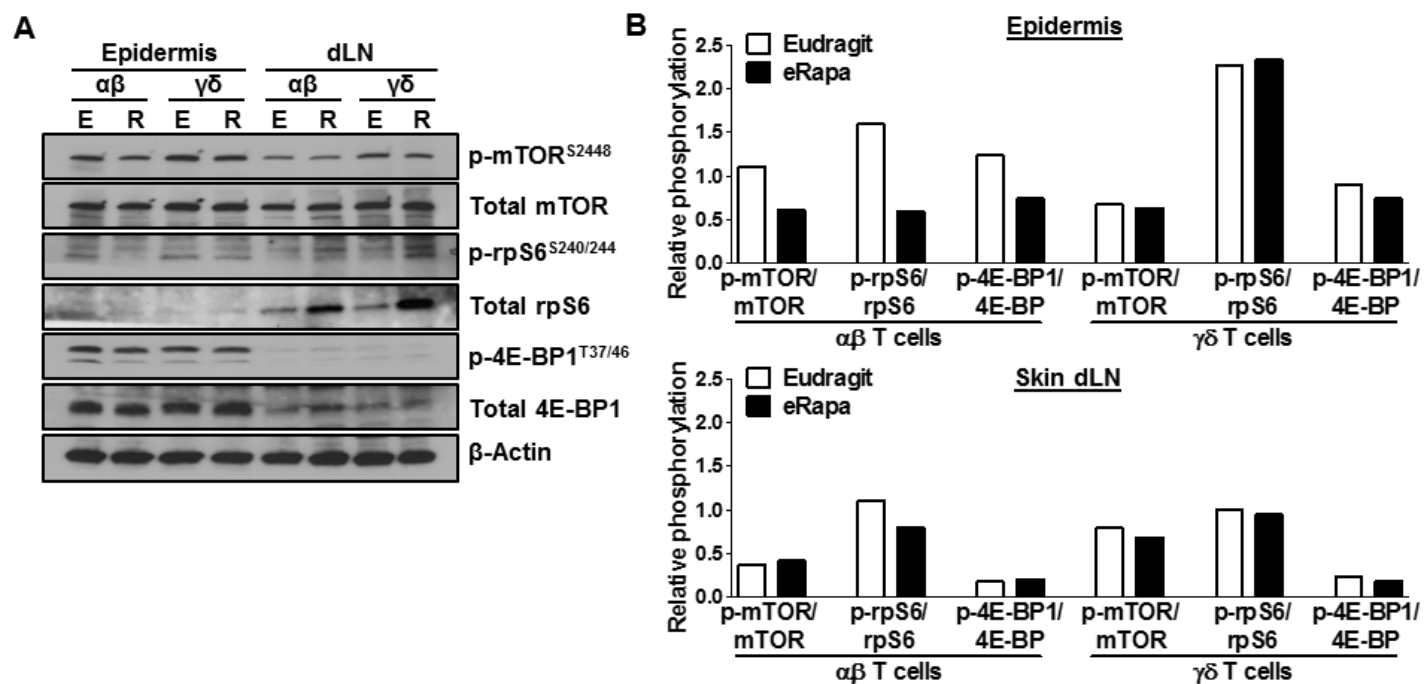
## Supplementary Data:



**Supplementary Figure 1. DMBA/TPA modulation of epidermal  $\alpha\beta$  and  $\gamma\delta$  TCR<sup>hi</sup> T cells in WT and CXCR3<sup>-/-</sup> mice.** Digested epidermis from WT and CXCR3<sup>-/-</sup> mice given short-course DMBA/TPA (DMBA plus 6x TPA). **A**, Frequency of CD45<sup>+</sup>CD3<sup>+</sup> $\alpha\beta$  TCR<sup>+</sup> T cells, N=5/group. **B**, Frequency of CD45<sup>+</sup>CD3<sup>+</sup> $\gamma\delta$  TCR<sup>hi</sup> T cells, N=5/group. *p*-values, one-way ANOVA with Neuman-Keuls post-test. ns, not significant, \*\*\**p*<0.001. Error bars, means  $\pm$  s.e.m.

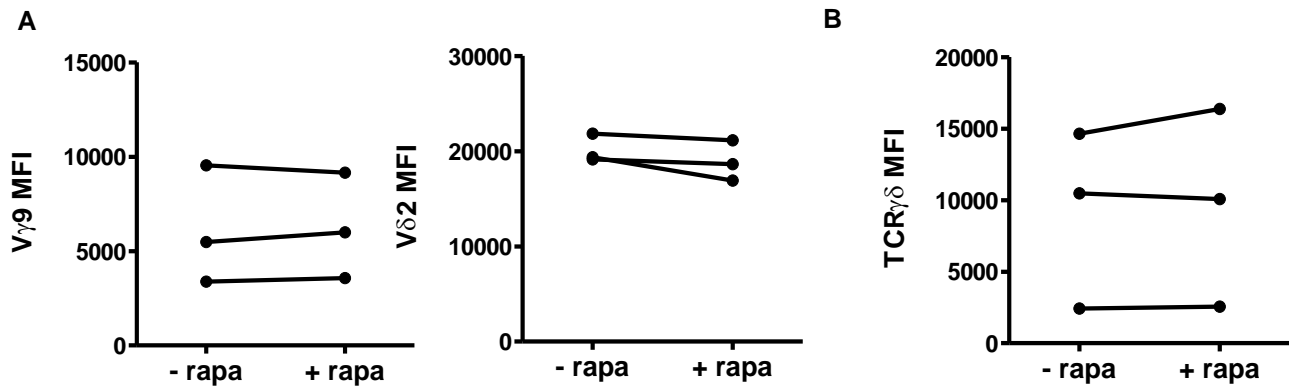


**Supplementary Figure 2. Epidermal chemokines in WT and IFN- $\gamma^{-/-}$  mice treated with Eudragit control or eRapa.** Epidermal concentrations of MCP-1, MCP-3, MIP-1 $\alpha$ , MIP-1 $\beta$ , MIP-2, and RANTES evaluated by Luminex, N=8/group.  $p$ -values<0.05 for MCP1 and MCP3 only, one-way ANOVA with Neuman-Keuls post-test. ns, not significant, \* $p$ <.05, \*\* $p$ <0.01, \*\*\* $p$ <0.001. Error bars, means  $\pm$  s.e.m.



**Supplementary Figure 3. mTOR signaling in epidermal and draining lymph node T cells.**

WT mice on Eudragit control or eRapa given DMBA and 3 TPA applications. **A**, Sorted  $\alpha\beta$  or  $\gamma\delta$  T cells from epidermis or skin draining lymph nodes (dLN) blotted for indicated proteins. Each column represents  $1.5 \times 10^6$  cells combined from 10 mice on Eudragit control or eRapa. E, Eudragit. R, eRapa. **B**, Western blot quantification from (A).



**Supplementary Figure 4.  $\gamma\delta$  TCR surface expression on cultured human  $\gamma\delta$  T cells.**

Peripheral blood mononuclear cells were expanded with isopentenyl pyrophosphate triammonium salt (IPP) and human recombinant IL-2  $\pm$  0.5 nM rapamycin for 14 days. **A**,  $\gamma\delta$  T cell cultures from 3 normal subjects assessed by flow cytometry with anti-human V $\gamma$ 9 (left) and V $\delta$ 2 (right), expressed as mean fluorescence intensity (MFI). **B**,  $\gamma\delta$  T cell cultures from 1 normal subject and 2 patients with muscle-invasive bladder cancer assessed by flow cytometry with anti-human  $\gamma\delta$  TCR, expressed as MFI.